

1. BACKGROUND

As part of the above-mentioned tender, it is a requirement to perform a practical evaluation on the proposed alarm systems as outlined in the relevant Eskom documents (document number 240-17000016, Section 3.3). This document will outline the anticipated logistics in order to perform the practical evaluation.

2. TESTING SITE

The site where the practical evaluation will be conducted is Eskom Tower Test Station (TTS), Rosherville next to Eskom Rotek Industries. It is located at the following co-ordinates using Google Maps: -26.224338186894556, 28.124367998868383. The link below can also be used in Google Maps.

<https://maps.app.goo.gl/JkxugxxnHdrDDSydA>

Entrance to the facility is from Lower Germiston road where you travel to the main gate and need to declare all equipment, tools and computers. Once checked in you proceed straight down the road up to a T-junction, turn left and follow the road.

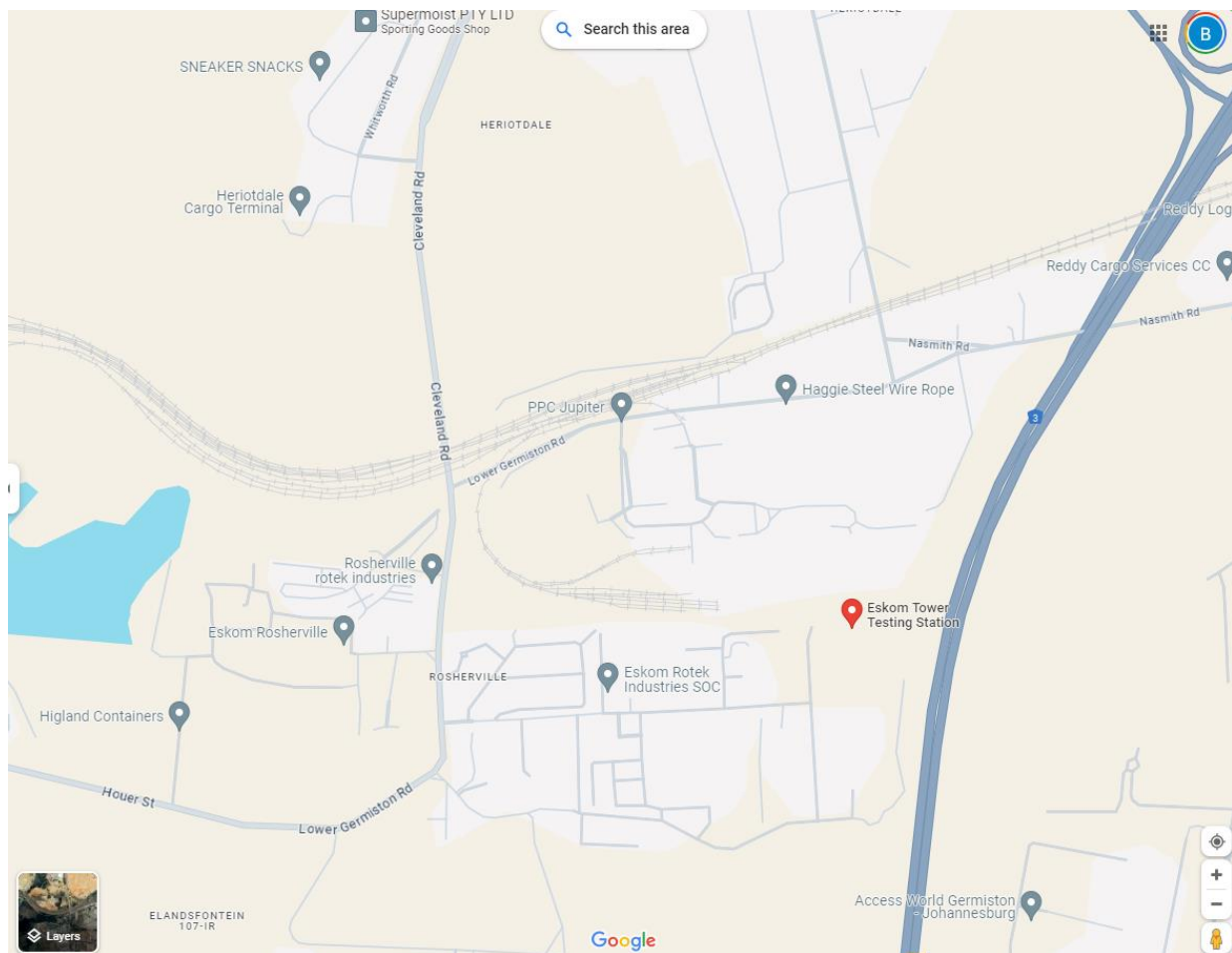


Figure 1: Overall Map showing TTS location

3. TEST OBJECT

The structure, which will be used for the theft simulation, is the type 704B which can be seen in Figure 2.



Figure 2: Type 704B structure

For the practical simulation the structure will be assembled without the two cross-arms at the top and laid flat on the ground supported by wood poles preventing the tower steel to be in contact with the ground surface. This set-up and arrangement will not necessitate working at heights and therefore all parts of the structure will be easily accessible.

The alarm sensors and equipment need to be installed at the top end while the cutting simulation will be conducted at the bottom taper end. A detailed outline drawing can be seen in Annexure A. This drawing also provide the key dimensions of the structure as well as member sizes for the different portions. Of interest is member group 2 and 10 on the drawing, which is the main members, and bracing members of the vertical mast section. These consists of angle profile members of size 70x70x6 mm for group 2 and 45x45x3 mm for group 10. Hence, these angle profile sizes can be used to design for example attachment clamps for sensors and equipment (if applicable) to the structure and must be representative of the clamps to be used in future. See Figure 2 for the type 704B mast section, which will be used for the practical evaluation.



Figure 3: Actual structure to be used for practical evaluation

4. CONTROL ROOM

There is a control room at TTS, which can be used to set-up the computers and other equipment necessary to simulate a typical security control room where alarm signals can be witnessed and evaluated. After setting up is done by the prospective tenderer and the instruction given to start the evaluation, Eskom personnel will for example then start loosening bolts on the structure which simulates a theft attempt and evaluators in the “control room” will conduct their evaluation accordingly. All information applicable to the required practical evaluation as per the evaluation criteria provided should be prepared for and readily demonstrated.

5. Time Frame and Programme

It is envisaged that two practical evaluations can be conducted on a day, one in the morning and one in the afternoon. This allows for about 3 hours for each tenderer to install, set-up, demonstrate and remove their system(s). A roster will be made available at a later stage and tenderers should plan in advance to meet the allocated time frames made available to them.

Outline drawing for 704B structure

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